



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,549	03/10/2004	Jai-Ho Lee	678-1187	4413
66547 7590 07/10/2008 THE FARRELL LAW FIRM, P.C. 333 EARLE OVINGTON BOULEVARD SUITE 701 UNIONDALE, NY 11553			EXAMINER CONTIE, JOY KIMBERLY	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 07/10/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,549

Applicant(s)

LEE, JAI-HO

Examiner

JOY K. CONTEE

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3, 6 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 6/30/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claim 2 (currently amended to claims 1 and 6) is withdrawn in view of the newly discovered reference(s) to Billhartz, US 2004/028016. Rejections based on the newly cited reference(s) follow.
2. Claim 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haas et al. (Haas), US Patent No. 2004/0025018, previously used, in view of Krause, US Pub. No. 2003/1095983, previously used, in further view of Billhartz, US 2004/0028016.

Regarding claims 1 and 6, Haas discloses a method (and module) for transmitting and receiving frames of a MAC (Medium Access Control) protocol layer module that processes data frames and control frames transferred from a MANET (Mobile Ad Hoc Network) protocol layer module in a station that receives frames

transmitted through a MANET including a plurality of stations, the method comprising the steps of: (1) distinguishing between control frames and data frames when analyzing frames transferred from the MANET protocol layer module (pages 2-4 [0017-0029] and pages 4-5 [0037-0052]).

Haas fails to explicitly disclose (2) providing the control frames with a higher priority than the data frames, thereby enabling the control frames to preempt a medium earlier than the data frames; and (3) transmitting the control frames and the data frames in an order according to their respective priorities.

In a similar field of endeavor, Krause discloses wherein (2) providing the control frames with a higher priority than the data frames, thereby enabling the control frames to preempt a medium earlier than the data frames; and (3) transmitting the control frames and the data frames in an order according to their respective priorities (see Page 12 [0168]).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Haas to include prioritizing control frames over data frames for the purpose of managing network congestion as suggested in Krause.

Further, the combination of Haas and Krause fails to explicitly disclose wherein the MANET protocol layer module transfers a frame control field, which includes a 'type' area indicating MANET data and a "subtype" area, to the MAC protocol layer module.

In a similar field of endeavor, Billhartz discloses wherein the MANET protocol layer module transfers a frame control field, which includes a 'type' area indicating

MANET data and a "subtype" area, to the MAC protocol layer module (reads on predetermined packet type) (see pages 1-2 [0011] and page 5 [0059-0061]).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Haas and Krause to include packet type indicators in the frame control field for the purpose of monitoring nodes as suggested in Billhartz (see page 5 [0061]).

Regarding claim 3, the combination of Haas, Krause and Billhartz disclose the method as claimed in claim 1, wherein the MANET protocol layer module transfers the frame control field to the MAC protocol layer module, in setting discrimination values into the 'Subtype' area of the frame control field to distinguish between the control frames and the data frames(see Billhartz pages 1-2 [0011-013]).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Haas and Krause to include packet type indicators in the frame control field for the purpose of monitoring nodes as suggested in Billhartz (see page 5 [0061]).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOY K. CONTEE whose telephone number is (571)272-7906. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571.272.7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

/Joy K Contee/
Patent Examiner (PSA), Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617